

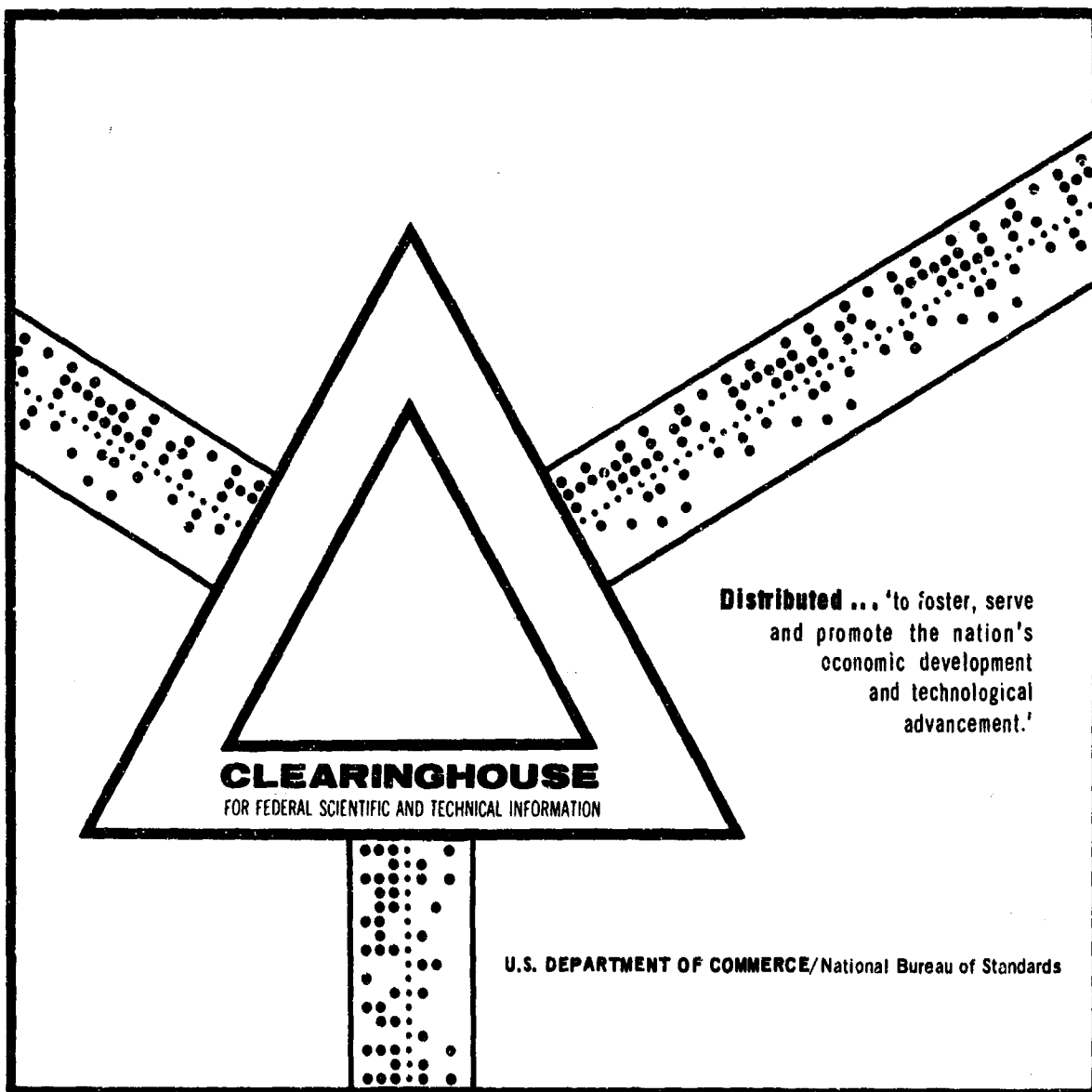
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## GLOSSARY OF DOCUMENTATION TERMS

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Paris, France

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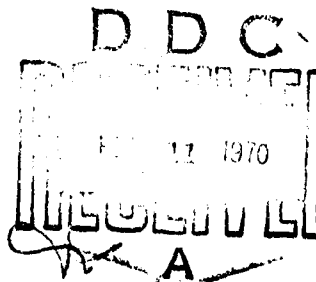
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# AGARD

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## Glossary of Documentation Terms



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NORTH ATLANTIC TREATY ORGANIZATION  
ADVISORY GROUP FOR AEROSPACE RESEARCH AND DEVELOPMENT  
(ORGANISATION DU TRAITE DE L'ATLANTIQUE NORD)

GLOSSARY OF DOCUMENTATION TERMS

Prepared by  
H. A. Stolk

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## GLOSSARY OF TERMS FREQUENTLY USED IN DOCUMENTATION

by

H.A. Stolk

### A

**ABSTRACT** - a brief objective condensation of a document indicating the object of the work carried out, assumptions made, methods, results obtained and conclusions reached; it should specifically indicate what is presented as original and be accompanied by adequate bibliographical information to enable the document to be traced. See also indicative abstract and informative abstract.

**ABSTRACT CARD** - usually a 5 by 3 inch card carrying an indicative or informative abstract of a document, etc., in a collection.

**ABSTRACT DESCRIPTOR GROUP** - a descriptor group listing descriptors that represent abstract concepts.

**ABSTRACTING SERVICE** - 1) process of regular production of abstracts (ref.4). 2) the organization producing the abstracts (ref.4).

**ABSTRACT JOURNAL** - a printed periodical usually published by an abstracting service, containing abstracts and complete bibliographic citations, grouped under broad headings, of publications and articles appearing in a given subject field.

**ACCESS** - 1) a device or method whereby a document may be found. More specifically the methods by which the codes in the question may be brought into coincidence with the codes in storage. Types of access depend on the grouping of codes, the arrangement of storage, its physical form, and the searching or selecting device which performs the match between question and storage. 2) having been granted permission and opportunity to use a document.

**ACCESSION** - 1) a document or piece of information that has been added to a collection. 2) the obtaining of an item, e.g. the adding of a technical report by a library to its collection; synonymous with acquisition (ref.6).

**ACCESSION LIST** - a list indicating what material has been acquired in the library over a period (ref.5).

**ACCESSION NUMBER** - the number assigned to an acquisition indicating the order of its entry into the collection.

**ACCIDENCE** - the non-essential variation in words, notably in flexion, e.g., sun solar (ref.3).

**ACRONYM** - a word used as a normally spoken word and formed from initial letter or letters of each of the successive parts or major parts of a compound term (ref.8).

**ACTIVITY** - a term to indicate that a record in a master file is used, altered or referred to.

**ACTIVITY RATIO** - when a file is processed, the ratio of the number of records in a file which have activity to the total number of records in that file.

**ADDRESS** - a label such as an integer or a set of symbols which designates a location where an item is stored; e.g. the call number on a book in a conventional library (ref.1).

**ADDRESS TABLE** - in connection with random access files, in which a fixed location is assigned to each entry, a list that links the leading term on each entry to the location (address) of that entry (ref.3).

**AFFECTIVE RELATION** - one of the ten analytical relations used in the semantic code; e.g. electroplating-electricity; the concept electroplating makes use of, is determined by, or influenced by the concept electricity (ref.3).

**ALPHABET OF SYMBOLS** - a repertory of distinct recognizable and repeatable sorts of symbol or characters, i.e. letters, numerals, or other symbols; e.g. the alphabet of the colon classification is 10 numerals, 26 capital letters, 26 small letters, 8 Greek letters and 9 punctuation marks (ref.3).

**ALPHABETICAL INDEX** - a descriptor file in which the descriptors are arranged in alphabetical order (ref.3).

**ALPHABETICAL SUBJECT CATALOGUE** - a collection of items arranged by subject matter. It is constructed by the assignment to each entry of a subject heading, and the arrangement of these entries in alphabetical order of the subject headings (ref.5).

**ALPHABETICO-CLOSED CATALOGUE** - a subject catalogue characterized by an alphabetical arrangement of main subject classes, each class being divided in subclasses of closely related subjects, the subclasses again arranged in alphabetical order.

**ALTERNATIVE LOCATIONS** - provisions for placing particular subject fields in more than one main class of a classification scheme; used by H.E.Bliss (ref.2).

**ANALYSIS** - a detailed examination of a document to determine and state its feature, including abstracting, classifying and indexing.

**ANALYTICAL ENTRY** - an entry for a part of a work, or series of works for which another comprehensive entry is made (American Library Association. Anglo-American Cataloguing Rules 1967).

**ANALYTICAL RELATIONS** - the ten relations used in the semantic code, developed by Western Reserve University, to link words to descriptors, here called semantic factors, in order to control the descriptor language, viz. categorical, intrinsic, inclusive, comprehensive, productive, affective, instrumental, negative, attributive and simulative relation (ref.3).

**ANALYTICO-SYNTHETIC CLASSIFICATION** - a classification scheme that transforms each constituent term into a class symbol, and represents the subject by an aggregate of such symbols; e.g. colon classification (ref.2).

**ANNOTATION** - 1) a note added to a document by way of comment or explanation. 2) a mark, word, words or code added to the citation of a document indicative of its information content, and usually placed adjacent that part of the document to which it refers.

**ANTONYM** - a word of opposite meaning (ref.8).

**APERTURE CARD** - a punched card with an opening specifically prepared for the mounting of a frame or frames of microfilm (ref.1).

**ARRAY** - 1) an ordinal arrangement of informational materials. 2) a set of mutually exclusive coordinate subclasses totally exhaustive of a class, derived by its division according to some one characteristic.

**ASPECT** - 1) a feature of information disclosed in a document (ref.10). 2) a relation between phases; used by S.R.Ranganathan.

**ASPECT CARD SYSTEM** - synonymous with feature card system (ref.3).

**ASPECT SYSTEM** - synonymous with term entry; used by A.Kent (ref.3).

**ATTRIBUTIVE RELATION** - one of the ten analytical relations used in the semantic code; e.g. coastal-ground. The concept coastal represents something which is represented by the concept ground (ref.3).

**AUTHOR CATALOGUE** - a collection of references to books, documents, etc. listed alphabetically under the name of the author or the person or body responsible for the publication, according to one of several standard books (ref.5).

**AUTHOR NOTATION** - see booknumber.

**AUTHOR NUMBER** - see booknumber.

**AUTHORITY LIST** - 1) a schedule of authorized subject headings for indexing or classification work, by means of which a degree of control is maintained over the choice and use of indexing terms; e.g. a thesaurus. 2) a list of originating authorities giving the preferred bibliographic description.

**AUTO-ABSTRACT** - 1) a collection of words selected from a document, arranged in a meaningful order, commonly by an automatic or machine method. 2) to select an assemblage of keywords from a document, commonly by an automatic or machine method.

**AUTO-ENCODING** - an automatic indexing procedure developed by H.P.Luhn, based on statistics of frequency of word usage, which finally results in a serial notation describing the various notions suggested by a document as well as the pattern of linkage between the various notions.

compare: automatic indexing.

**AUTO-INDEX** - to prepare an index by a machine method.

**AUTOMATIC ABSTRACTING** - techniques whereby, on the basis of statistical properties, a subset of the sentences on a document is selected as representative of the general content of that document (ref.1).

**AUTOMATIC DICTIONARY** - the component of a language translating machine which will provide a word for word substitution from one language to another. In automatic searching systems, the automatic dictionary is the component which substitutes codes for words or phrases during the encoding operation.

**AUTOMATIC INDEXING** - 1) to prepare an index by a computer method, thereby using the computer entirely for clerical tasks such as sorting and putting things in order, arranging different displays of material and printing information onto pages in a specified manner. 2) subject analysis and the assignment of index terms of the material being indexed, performed by computer methods. These methods are based on the assumption that statistics on kind, frequency, location, order, etc. of selected words are adequate to make reasonably good predications about the subject matter of documents containing those words (ref.1).

## B

**BARE DESCRIPTOR** - a character without hierarchy and without logic; the name assigned by B.C.Vickery to the descriptors used in Mooers' Zetocodin (ref.3).

**BARRIERS** - arbitrary sign used to divide syntactic levels in telegraphic abstracts.

**BASE** - 1) the maximum number of classes in any array of a classification; used by G.Cordonnier. 2) the total number of digits in a notation; used by S.R.Ranganathan.

**BASE OF NOTATION** - the set of digits used in constructing code symbols; used by B.C.Vickery (ref.2). see also: base 2).

**BASE OF SYMBOLISM** - synonymous with alphabet of symbols; used by B.C.Vickery (ref.3). see also: base 2).

**BATTEN CARD** - the name assigned to the peek-a-boo type of feature card in the Batten-Cordonnier system (ref.5).

**BATTEN-CORDONNIER SYSTEM** - a manual system of indexing using term entry and employing cards of the peek-a-boo variety; by coordination of single terms specific documents can be identified (ref.5).

**BIAS** - a relation between phases, the primary phase being studied from the point of view of the secondary or biasing phase; used by S.R.Ranganathan.

**BIBLIOGRAPHY** - a list that refers to writings related to a subject, period, author, or other unifying concept, e.g. a list of works by an author, works on a certain subject, or works of a certain period of time. Bibliographies may contain abstracts or annotations. They may be a part of other works or may be separate items. In a written work a bibliography generally indicates additional pertinent literature, whereas references support statements made in a document (ref.6).

**BIBLIOGRAPHIC CLASSIFICATION** - a classification developed by H.E.Bliss covering all knowledge and exhibiting a progression from general science through physics, chemistry, cosmology, biology, botany, zoology and anthropology to useful arts, an order which is based on "scientific and educational consensus". It is further characterized by development from generic to specific (subordination), collocation of related subjects (co-ordination) while providing alternative locations and composite specification (ref.5).

**BIBLIOGRAPHIC DESCRIPTION** - synonymous with descriptive cataloguing (ref.3).

**BIBLIOGRAPHIC INDEX** - an index of publications or articles containing no material descriptive of their contents other than bibliographic references.

**BIGRAM** - any group of two successive letters (ref.8).

**BINARY** - 1) pertaining to a characteristic or property involving a selection, choice or condition in which there are two possibilities. 2) pertaining to the number representation system with a base of two.

**BINARY CODE** - a code that makes use of exactly two distinct characters, usually 0 and 1.

**BINARY NOTATION** - the writing of numbers in the scale of two. The first dozen numbers zero to eleven are written 0, 1, 10, 11, 100, 101, 110, 111, 1000, 1001, 1010, 1011. The positions of the digits designate powers of two; thus 1010 means 1 times two cubed or eight, 0 times two squared or four, 1 times two to the first power or two, and 0 times two to the zero power or one; this is equal to one eight plus no four's plus one two plus no ones, which is ten (ref.1).

**BINARY SEARCH** - a search in which a set of items is divided into two parts, where one part is rejected, and the process is repeated on the accepted part until the item with the desired property is found.

**BIT** - a contraction of the term binary digit. A unit of measure of information consisting of the amount transmitted or stored by the choice of one out of a possible two signals, a 0 or a 1 (ref.1).

**BLACK HEADINGS** - headings in a dictionary catalogue other than subject headings.

**BLISS CLASSIFICATION** - see bibliographic classification.

**BLOCK INDEXING** - a system of indexing wherein "blocks" of materials are collected, each block being small enough to permit easy manual search of the group contained therein.

**BOOKFORM CATALOGUE** - a catalogue having the physical form of a book; the systematically arranged entries are printed on pages which are bound into a book.

**BOOKFORM INDEX** - an index having the physical form of a book; the alphabetically arranged index terms accompanied by their specific references, are printed on pages which are bound into a book.

**BOOKNUMBER** - a symbol usually consisting of a combination of letters and figures, which serves to identify a given book among others bearing the same class number, and, at the same time to place books bearing the same class number in the desired order on the shelves, by number, author notation or Cutter number.  
When used to arrange books alphabetically by author it is called author number or author notation; Library of Congress.

**BOUND** - as used in coordinate indexing, terms joined in modification of the meaning of a commonly used term. For example, "free energy" is a bound term while "free" and "energy" may be free terms in the same coordinate indexing system (ref.1).

**BROWN'S SUBJECT CLASSIFICATION** - a classification scheme worked out by J.D.Brown. Its chief characteristics are the outline grouping of subjects in the order Matter and Force, Life, Mind, Record; the use of an integral notation; the collocation of pure and applied science; and the categorical table. The scheme has almost fallen into disuse (ref.5).

**BROWSABILITY** - the ability of a documentation system to lend itself to unsystematic or random searches. An open-stack library, for example, with literature arranged in subject categories, allows the user to browse in a subject category.

**BRUSSELS CLASSIFICATION** - synonymous with Universal Decimal Classification.

## C

**CALENDAR** - a chronologically arranged sequence of documents pertaining to a single author, subject, series, or class.

**CALL NUMBER** - 1) the class number and the book number by which the location of the book on the shelf is indicated. (ref.1).

**CANONICAL ORDER** - a possible order for terms in an array forming a series of coordinate classes; order by means of a notation; used by S.R.Ranganathan. Synonymous with E.C.Richardson's mathematical order. (ref.2).



**CARD CATALOGUE** - a catalogue having the entries on cards, usually of 5 by 3 inch size.

**CARD INDEX** - an index where cards are arranged in alphabetical or numerical order.

**CATALOGUE** - 1) a list of items with descriptive data, usually arranged so that a specific kind of information can be located readily. 2) to state the significant features of an item with the purpose of distinguishing it from other items and describing its scope, contents and bibliographic relation to other items.

**CATALOGUE CARD** - usually a 5 by 3 inch card, carrying the bibliographic record of a single item in a collection.

**CATALOGUING** - 1) the science or the profession of classifying books or other library material and making out appropriate entries for library catalogues. (ref.8). 2) to enter the name of or appropriate information about in a catalogue; esp. to describe the physical format of and classify books or other library material. (ref.8).

**CATALOGUING RULES** - a code of rules for the construction of author catalogues, e.g., the British Museum Code, the Joint Code, Rules for descriptive cataloguing in the Library of Congress, etc. (ref.5).

**CATCHWORD INDEXING** - a method of indexing in which significant words in a title are used as subject headings. (ref.5).

**CATEGORICAL RELATION** - one of the ten analytical relations used in the semantic code; e.g., gold-metal. The concept gold is a member of the class represented by the concept metal. (ref.3).

**CATEGORY** - 1) a natural classification, usually intuitive. 2) a logical grouping of associated documents.

**CENTER** - an activity or installation that makes available at one central point a pool of specialized personnel or services for the benefit of other activities or individuals, e.g., the Defense Documentation Center. (ref.6).

**CHAIN** - 1) a hierarchy of modulated subclasses of decreasing extension and increasing intension derived by successive division leading to a compound or complex class in general or denotation within a facet of any class in particular; used by S.R.Ranganathan. 2) a series of items linked together.

**CHAIN INDEXING** - a method of indexing for the classified catalogue whereby the index entries to material on a given subject, being scattered in different places in the catalogue, all appear in one place. It consists in citing the terms represented by a given class symbol in the reverse order of the symbol, so that the last term in the symbol becomes the first, and thereby the entry term, in the alphabetical index. Further entries are then made by deleting from the front of the basic index entry one term at a time and from the class symbol the element corresponding to the term so removed (ref.5).

**CHAIN OF CATEGORIES** - a sequence of categories representing the order in which nouns have to be combined in a compound heading, e.g. thing-part-constituent-property-measure.

**CHARACTER READER** - a specialized device which can convert data represented in one of the type fonts or scripts read by human beings directly into machine language. Such a reader may operate optically or, if the characters are printed in magnetic ink, the device may operate magnetically or optically.

**CHARACTER RECOGNITION** - the technology of using a machine to sense and encode into a machine language characters which are written or printed to be read by human beings.

**CHARACTERISTIC** - 1) an aspect, subject, idea, concept, or element of description applicable to the content of an item of recorded information, which may be useful for future identification of the item (ref.1).

**CHECKLIST** - an enumeration of documentary holdings with a minimum of organization and bibliographic information.

**CHRONOLOGICAL ORDER** - a possible order for terms in an array forming a series of coordinate classes; order according to position in time; used by E.C.Richardson (ref.2).

**CITATION** - a reference.

**CITATION INDEX** - 1) a list or tracing of the references mentioned in a particular document or group of documents; used primarily for legal documents (ref.4). 2) an index using footnote reference in documents as coupling mechanism among related papers (ref.1).

**CLASS** - 1) a group of items having the same or similar characteristics; any subdivision in a classified sequence (ref.1). 2) a major subdivision of a category.

**CLASS** - 1) to arrange subjects according to an existing scheme of classification. 2) to classify, to assign, or refer, a document to a class in a scheme of classification (ref.4).

**CLASSIFICATION** - 1) the arrangement of documents or concepts or objects into logically connected groups. 2) a systematic division of a group of related subjects. 3) a schedule for the arrangement or organization of documents.

**CLASSIFICATION SCHEDULE** - synonymous with descriptor schedule; used by B.C.Vickery (ref.3).

**CLASSIFICATION STRUCTURE** - synonymous with descriptor file structure; used by B.C.Vickery (ref.3).

**CLASSIFICATION SYSTEM** - an orderly arrangement of terms developed by logical division of a subject by means of a train of characteristics. Extended to mean any form of systematically arranged subject matter (ref.4).

**CLASSIFIED CATALOGUE** - a collection of items arranged by subject matter according to some classification scheme. It is constructed by the assignment to each entry of the appropriate class symbol and the arrangement of these entries in classified order. It is generally provided with an alphabetical index to the catalogue, i.e. a list of subjects arranged in alphabetical order with the appropriate class symbol against each (ref.5). see also catalogue 1).

**CLASSIFIED INDEX** - an index characterized by subdivisions of a hierarchic structure. An index using or displaying genus-species (class-subclass) relationships as distinguished from a correlative index, definition by C.Bernier.

**CLASSIFIED LIST** - a device displaying hierarchical links (generic relations) between descriptors, used for retrieval purposes, e.g., an alphabetical list of terms containing see references as in the IUC Thesaurus or a list of generic charts of the following kind

A     reactor components  
  B     fuel element  
    H     plates

in which A is generic to B and B is generic to H (ref.3).

**CLASSIFY** - 1) to make a classification or classification system (ref.4). 2) to place in or assign to classes. 3) to assign information to security classification categories (ref.4).

**CLASS NUMBER** - a symbol applied to a book indicating the class to which it belongs in the classification system used in the Library of Congress.

**CLASS NUMBER CONSTRUCTION** - the synthesis into a class number by arranging the symbols representing the component terms of a specific subject according to the combination order adopted in the classification (ref.2).

**CLASS RELATION** - synonymous with generic relation (ref.3).

**CLEARANCE** - authorized to have access to classified (secret) information required by official duties.

**CLEARINGHOUSE** - an organization that collects and maintains records of research, development, and engineering being planned, currently in progress, or completed, provides documents derived from these activities, and provides referral services to other sources for information relating to these activities (ref.6).

**CLOSED ARRAY** - an array which cannot be extended at either end; used by S.R.Ranganathan.

**CLUMP** - a group of co-occurring keywords found in documents and to which a single, humanly chosen, class descriptor has been assigned; e.g. denseness, solidness, solidity are related to the class descriptor density (ref.3).

**CLUSTER** - a group of related documents.

**CODE** - 1) any system of symbols in the communication process, particularly a system which achieves abbreviation, consistency of expression, ease of representation, or some other desirable advantage over common language or numerical expression (ref.1). 2) a label to identify a routine, location, operator, name, etc.

**CODE** - use encode.

**CODE COMPARISON** - in human search the matching of search words with words in a descriptor file (ref.3).

**CODE FREQUENCY** - the frequency of use of descriptors in a retrieval system; for efficiency the code lengths of the descriptors should vary inversely as the logarithm of the frequency of use (ref.3).

**CODE INDEX** - in information retrieval any list of headings which directs the searcher, by means of a code number, towards information on the subject of enquiry (ref.2).

**CODEN** - a code classification assigned to a document or other library item consisting typically of four capital letters followed by two hyphenated groups of arabic numerals (ref.8).

**CODING** - any symbolism other than legible natural language; used by B.C.Vickery (ref.3).

**CODING SHEET** - a sheet listing the results of analysis of a document in the form of the symbols of a code.

**COINCIDENT HOLE CARD** - synonymous with peek-a-boo card.

**COLLATE** - 1) to compare or examine critically, particularly to verify the presence or absence of specific items in a text, e.g. printer's errors, missing pages, handwritten annotations. 2) to assemble the pages of a document in correct order, hence also, to interleave.

**COLLATION** - the bibliographical description of a book expressed in a formula in which information about size, signatures and pagination is presented by symbols (ref.8).

**COLLECTIVE CATALOGUING** - a method of cataloguing minor and fugitive material by  
 - assembling a group of material and assigning it a heading and a collective title  
 - cataloguing it by the use of form cards stating corporate or personnel author and the class number (ref.5).

**COLON** - 1) a device used in the UDC to link related class terms. 2) a device used in the colon classification to separate successive foci. Later, in the colon classification, a device to introduce the energy facet. 3) a punctuation mark intermediate in effect between a full stop and a semicolon and used especially to mark antithesis, illustration or quotation.

**COLON CLASSIFICATION** - a faceted classification system developed by S.R.Ranganathan, in which documents are analyzed by such generic concepts (facets) as "method", "problems", "variable" and "space". A special notation has been developed for this system (ref.1).

**COLOUR CODING** - visual presentation of headings in a conventional card catalogue, indicating them by coloured signals; e.g. in a catalogue of periodicals, the colours indicating the frequency, subject, language etc. of each title (ref.2).

**COMBINATION CODING** - coding of a specific subject by the joint notching of two or more card positions in hand-sorted edge notched card systems (ref.3).

**COMBINATION ORDER** - the order in which facets in a compound subject heading are to be arranged; e.g. in an order of decreasing concreteness, introduced by Ranganathan in his concept of fundamental categories, viz personality, matter energy, space, time, of which all particular categories are manifestations (ref.2).

**COMBINATORY SYSTEM** - synonymous with correlative system (ref.3).

**COMBINING POWER** - in a correlative system the more or less outspoken tendency of particular descriptors to co-occur (ref.3).

**COMMON FACETS** - facets or terms which may occur in more than one field in a general classification (ref.2).

**COMMUTATIVE CHARACTERS** - with commutative characters the order in which statements are made does not matter; AB means the same as BA (ref.3).

**COMPLEMENTARY CODE** - a code being the negative of a given code; e.g. if the given code is in the form OTTOOTTOTOTTOO, the complementary code is in the form TOOTTTOOTTOTOTT (ref.2).

**COMPOSITE CLASSIFICATION** - a classificatory method in which specific subjects are represented by coupling elementary terms; used by B.C.Vickery.

**COMPOSITE SCHEDULES** - the result of subdivision into categories of the main fields in a classification (ref.2).

**COMPOUND** - a pattern of data units showing all the features possessed in common by a given set of items - identical with all the items possessed in common by the appropriate set of features.

**COMPOUND HEADING** - a series of general terms coming together in a coordinate relationship to designate a complex idea, more specific than the designation of either term taken by itself; according to M.Taube (ref.2).

**COMPREHENSIVE RELATION** - one of the ten analytical relations used in the semantic code; e.g. forest-plant. The concept forest is a composite of several members of the class represented by the concept plant (ref.3).

**CONCEPT COORDINATION** - a term used to describe the basic principles of various punched card and mechanized information retrieval systems which involve the multidimensional analysis of information and coordinate retrieval. In concept coordination, independently assigned concepts are used to characterize the subject contents of documents and the latter are identified during searching by means of either such assigned concepts or a combination of the same.

**CONCORDANCE** - 1) an index, table, or the like, showing where matter classified in one classification system may be found in another. 2) an alphabetical list of words and phrases appearing in a document, with indications of the place such words and phrases appear in the text.

**CONJUNCTION** - a symbol in a classification term coupling two substantives; used by S.R.Ranganathan.

**CONJUNCTIVE SEARCH** - a search procedure using logical products and logical differences of the search terms (ref.3).

**CONSONANT CODE** - a systematic method of abbreviating words by deleting the vowels; e.g. write = wrt, inform = nfrm (ref.3).

**CONSTITUENT** - a part which can be separated from its whole without loss of identity (ref.2).

**CONTENTS LIST BULLETIN** - a periodical bulletin consisting of copies of the contents lists of selected periodicals, assembled into some form of cover (ref.5).

**CONTROLLED CIRCULATION** - a way of circulating periodicals whereby each periodical has to be returned to the library by each individual user, and the library sends it out to the new individual on the routing list (ref.5).

**CONTROLLED TERM LIST** - a list of terms or descriptors in which strict control is exercised as to the meaning of terms and to the addition of terms, and according to which the features in a document being analysed are indexed.

**COORDINATE CLASSES** - the series of terms in an array that represent classes derived from a universe by the application of a succession of characteristics and which are collectively exhaustive of that universe (ref.2).

**COORDINATE INDEXING** - a method of indexing by the joint use of two or more terms, so that retrieval is performed by the logical operations of product, sum and complement of the codes in storage (ref.1).

see also concept coordination	uniterm indexing	zatocoding system
manipulative index	semaphore indexing	

**COORDINATE RELATION** - the relation between terms which are subordinate to the same term (ref.3).

**COPYRIGHT** - the exclusive, legally secured right to reproduce, publish and sell the matter and form of a literary or artistic work for a specified period with a right of renewal (ref.8).

**CORDONNIER SYSTEM** - synonymous with peek-a-boo system.

**CORPORATE AUTHOR** - the group or corporation responsible for the publication of a book, document etc.

**CORRELATIVE INDEX** - an index enabling selection of documents or of references to them by correlation of words, numbers or other symbols which are usually unrelated by hierarchic organization; definition by J. Bernier.

**CORRELATIVE SYSTEMS** - non-conventional indexing or retrieval systems in which any descriptor can be combined with any other, to represent the subject of a document.

**CROSS CLASSIFICATION** - the subdivision of a facet by more than one train of characteristics, each forming an independent hierarchy (ref.2).

**CROSS REFERENCE** - annotation of direction at one part of a document referring to pertinent information at another part of the document (ref.8).

**CUMULATIVE INDEX** - an organized or systematic list issued periodically, whereby the entries of preceding issues are combined in successive issues while maintaining the original order of arrangement.

**CURRENT AWARENESS** - the knowledge of what other scientists have recently done, or are doing, both in the specific field in which the scientist is working and also in a broader area around his work (ref.3).

**CUTTER CLASSIFICATION** - see expansive classification.

**CUTTER NUMBER** - see booknumber.

## D

**DATA** - a general term used to denote any or all facts, numbers, letters and symbols, or facts that refer to or describe an object, idea, condition, situation or other factors. It connotes basic elements of information which can be processed or produced by a computer. Sometimes data is considered to be expressible only in numerical form, but information is not so limited.

**DATA CENTER** - an organization primarily for acquiring, processing, storing, retrieving and disseminating data. The data processing done at a data center does not include evaluation: this is done at an information evaluation center (ref.6).

**DATA PROCESSING** - a systematic sequence of operations, performed in accordance with precise rules of procedure, on data, e.g. the sorting of the names of chemical compounds in accordance with some common characteristic; or the translation of scientific text (ref.6).

**DATAMATION** - a shortened term for automatic data processing; taken from data automation.

**DATUM** - 1) a postulate or specification of information given. 2) the smallest element of information. A bit.

**DECIMAL CLASSIFICATION** - a system of classifying library books and other material developed by Melvil Dewey, whereby the main classes and subclasses are designated by a number composed of three digits and further subdivision is shown by numbers after a decimal point. Also Dewey Classification.

**DECK** - a collection of cards, commonly a complete set of cards which have been punched for a definite service or purpose.

**DECLASSIFY** - to remove from the security classification under proper authorization.

**DEDICATED SPACE** - physical space, provided on a visual punched card, for the representation of new documents integrated in the system (ref.1).

**DEFINITIVE RELATION** - the relation of a word to the set of words which make up its definition, i.e. representing a word by a combination of descriptors which collectively define it; used by C.L. Bernier (ref.3).

**DELETION RECORD** - a new record which will replace or remove an existing record of a master file.

**DENUDATION** - in terms of the colon classification a mode of formation of new specific subjects, the denudation of a class to form a subclass (ref.2).

**DESCRIPTIVE CATALOGUING** - a library procedure by which a book or other item is identified and described by recording such items as author, title, imprint and collation (ref.8).

**DESCRIPTOR** - an elementary term, word, or simple phrase used to identify a subject, concept or idea.

**DESCRIPTOR ASSOCIATION LIST** - a list of descriptors associated with a particular descriptor or group of particular descriptors in a system (ref.3).

**DESCRIPTOR FIELD** - the area of subject matter covered by descriptors.

**DESCRIPTOR FILE** - a file containing the subject description (descriptors), the specification and the address of each item (documents) in a store (ref.3).

**DESCRIPTOR GROUP** - subdivision of a descriptor field, indicating the extent of that field.

**DESCRIPTOR INFLEXION** - indicating the role of a descriptor in a combination by inflexion, i.e. by a genitive ending, an instrumental ending or a role indicator (ref.3).

**DESCRIPTOR NETWORK** - a diagram which illustrates the logical relations between descriptors (ref.3).

**DESCRIPTOR SEQUENCE** - a regulated combination order of descriptors, e.g. the sequence thing-part-constituent-property-measure, or thing-operation-agent (ref.3).

**DEWEY CLASSIFICATION** - synonymous with decimal classification (ref.1).

**DICHOTOMY** - a division into two subordinate classes, e.g. all white and all non-white, or all zero and all non-zero.

**DICTIONARY CATALOGUE** - a catalogue in which all entries are interfiled to form a single alphabet, as in a dictionary; used by the Library of Congress.

**DICTIONARY CODE** - an alphabetical arrangement of English words and terms, associated with their code representation.

**DIFFERENTIAL FACET** - a facet which applies only to a restricted group of terms in the facet being enumerated (ref.2).

**DIFFUSE FACETS** - facets representing very generalized and abstract activities with no primary substance specified (ref.2).

**DIGEST** - an informative abstract (ref.5).

**DIGITAL DATA** - data represented in discrete, discontinuous form, as contrasted with analog data represented in continuous form. Digital data is usually represented by means of coded characters, e.g. numbers, signs, symbols, etc.

**DIMENSIONALITY** - a characteristic of the descriptor network; the dimension of an element is the length (i.e. the number of links) of the longest downward chain from this element; used by R.A.Fairthorne (ref.3).

**DIRECT CODING** - a coding method for edge notched cards whereby each term is represented by a single notch (ref.2).

**DIRECTORY** - a file with the layout for each field of the record which it describes; thus a directory describes the layout of a record within a file.(ref.2).

**DISJUNCTIVE** - a symbol which separates two or more independent classes.

**DISJUNCTIVE SEARCH** - a search procedure using the logical sum of the search terms (ref.3).

**DISPLAY** - a visual presentation of data.

**DISSECTION** - in terms of the colon classification a mode of formation of new specific subjects by the dissection of a class to form an array of subclasses; used by S.R.Ranganathan (ref.2).

**DISSEMINATION OF INFORMATION** - the provision or distribution of information especially from a gathering or storage point, to persons or organizations (ref.4).

**DISTRIBUTED FACETS** - facets in a compound subject which are scattered throughout a classification as a result of the combination order applied; also distributed terms.

**DOCUMENT** - a record of data, or a concept, in any form from which information can be derived, e.g. a page containing data, a graphic representation, a tape recording, or a book (ref.6).

**DOCUMENTATION** - the process of collecting, organizing, storing, citing and dispensing of documents or the information recorded in documents (ref.8).

**DOCUMENTATION CENTER** - an organization that performs all of the functions of a document center, i.e. selecting, acquiring, storing and retrieving specific documents, and, in addition, announces, abstracts, extracts, indexes and disseminates documents in response to requests (for secondary distribution) expressed as accession numbers, subjects, titles authors, sponsoring agencies, or contract or grant numbers etc. The output of a documentation center consists of the documents received, or copies of them, indexes, bibliographies, catalogue cards, announcement bulletins and the like (ref.6).



**DOCUMENT CENTER** - an organization primarily limited to selecting, acquiring and storing and retrieving specific documents; and disseminating only in response to requests expressed as unique numbers. The document center disseminates the documents delivered to it, or facsimiles of them: further processing such as retrieving, abstracting, extracting, and the like, is done at the documentation center (ref.6).

**DOCUMENT SYSTEM** - synonymous with item entry; used by A.Kent (ref.3).

**DOUBLE ROW CODING** - a coding method for edge notched cards having a double row of holes on the edge which permit to punch three notches or slots at each position (deep, shallow and intermediate punching).

**DOWNGRADE** - to assign a document to a less restricted security classification.

**DROP-OUT** - the totality of documents identified by a retrieval system as answering a search question in the form in which it is put to the system.

**DROPPING FRACTION** - applied to edge notched card systems, the fraction of the file delivered after needle sorting (ref.3).

**DYNAMIC ORDER** - a possible order for terms in an array which form a series of coordinate classes; order of power; used by E.C.Richardson (ref.2).

## E

**EDGE NOTCHED CARD** - a card of any size provided with a series of holes on one or more edges for use in coding information for a simple mechanical search technique. Each hole position may be coded to represent an item of information by notching away the edge of the card into the hole. Cards containing desired information may then be mechanically selected from a deck by inserting a long needle in a hole position and lifting the deck to allow the notched cards to fall from the needle. Unwanted cards remain in the deck.

**EDGE PUNCHED CARD** - a card of fixed size into which information may be recorded or stored by punching holes along one edge in a pattern similar to that used for punch tape, thereby leaving the center free for written or printed information. Hole positions are arranged to form coded patterns in 5, 6, 7 or 8 channels and usually represent data by binary coded decimal system; synonymous with margin-punched card.

**EFFICIENCY FACTORS** - factors which express retrieval efficiency (ref.3).

Given that     $N$  = total number of documents in a system  
                   $R$  = number of documents retrieved by a search  
                   $H$  = number included in  $R$  which are relevant  
                   $P$  = number included in  $N$  which are relevant

we can use the following factors:

Resolution factor  $R/N$  = the fraction of documents retrieved by a search.

Elimination factor  $(N-R)/N$  = the fraction not retrieved.

Pertinency factor  $H/R$  = the fraction of retrieval documents which are relevant.

Noise factor  $(R-H)/R$  = the fraction not relevant.

Recall factor  $H/P$  = the fraction of relevant documents retrieved by the system.

Omission factor  $(P-H)/P$  = the fraction not retrieved.

**ELEMENTARY TERM** - an individual term which is combined in a composite classification to form a subject (ref.4).

**ELIMINATE AND COUNT CODE** - a systematic method of abbreviating words.

**ELIMINATION FACTOR** - see efficiency factors.

**EMPTY SYMBOLS** - in colon classification a symbol or signpost being empty of meaning and used to distinguish facets, levels, or zones; used by S.R.Ranganathan (ref.2).

**ENCODE** - 1) to put in symbolic form. 2) to transform a document, message, or abstract by means of a specific notation. 3) to associate a specific code with each letter of an alphabet.

**ENERGY** - in colon classification one of the five fundamental categories (time, space, energy, matter and personality) of which the facets encountered in the field of knowledge are manifestations. Energy covers facets as problem, method, process, operation, handling and technique; used by S.R.Ranganathan (ref.2).

**ENGINEERING NOISE** - false retrieval due to mistakes in coding by human agents, errors in machine operation, or false combinations deliberately allowed in the design of the retrieval system; used by B.C.Vickery (ref.3).

**ENTITY** - 1) an existent, concrete or conceptual; used by S.R.Ranganathan. 2) a material subject, often in contrast to a non-material one, e.g. church representing the building is an entity, church representing the social institution is not.

**ENTROPY** - the unavailable information in a group of documents. The degree of disorganization in an informational assemblage.

**ENTRY** - 1) a single record of a book, document, etc. in a catalogue (Landau): it consists of a subject heading, a description of the document and its location (Coates) (ref.3). 2) a word or term entered alphabetically in a dictionary for the purpose of definition or identification (ref.8).

**ENUMERATIVE CLASSIFICATION** - a classification based on a list of the individual subjects to be included.

**ENUMERATIVE NOTATION** - synonymous with fenced notation (ref.2).

**EVOLUTIONARY ORDER** - a possible order for terms in an array which form a series of coordinate classes; order from simple to complex; used by E.C.Richardson (ref.2).

**EXHAUSTIVITY** - the number of descriptors assigned per document (ref.3).

**EXPANSIVE CLASSIFICATION** - a library classification using both numbers and letters in its notation and having seven complete editions or schedules, each one after the first being more minutely subdivided than the previous one; developed by C.A.Cutter, hence Cutter Classification (ref.5).

**EXTRACT** - verbatim passages from a document; or to select such passages. The purpose of an extract is to convey the substance or essence of a document (ref.6).

**EXTRAPOLATION OF ARRAY** - adding a new term to an array by putting it after the last term in that array (ref.2).

## F

**FACET** - 1) an aspect or orientation of a topic. 2) the totality of the subclasses of a basic class derived by the use of a single train of characteristics (ref.7).

**FACET ANALYSIS** - the grouping of terms used in a given field into conceptual categories each of which has been differentiated on the basis of a different characteristic (ref.2).

**FACETED CLASSIFICATION** - a classification built up by facet analysis; a set of schedules in which the terms are grouped into facets and in these facets arranged in a generic order (ref.2).

**FACET INDICATORS** - a connecting symbol, i.e. a colon, comma, dot, used to introduce a facet in colon classification.

**FACET INTERPOLATION** - the insertion of a new facet into a field or main class (ref.2).

**FALL-OUT RATIO** - a measure used in evaluating the operational performance of information retrieval systems, i.e.  $\frac{\text{retrieved number of non-relevant documents}}{\text{total number of non-relevant documents}} \times 100\%$

**FALSE COMBINATIONS** - noise produced by simple correlation of descriptors (ref.3).

**FALSE-DROP** - a reference citation that does not pertain to the subject sought.

**FALSE RETRIEVALS** - library references which are not pertinent to, but are vaguely related to, the subject of the library search.

**FALSE SORTS** - synonymous with false combinations.

**FEATURE CARD SYSTEM** - a system of file organization wherein each card represents a feature or aspect of information, the card containing, in some form, the list of the documents which contain information on that feature. Peek-a-boo is one such form. (The inverse of item card system.)

**FEATURES SYSTEM** - synonymous with feature card system and aspect card system.

**FEED BACK** - communication between the enquirer and the searcher on the results of the latter's performance.

**FENCE** - a connective symbol separating successive elements of a semantic compound (ref.2).

**FENCED NOTATION** - a style of notation which separates terms by a fence in order to combine them, e.g. by repeating the notational base or class number giving rise to facets in every facet to form compounds (ref.2).

**FICHE** - a card or sheet film containing information.

**FIELD OF KNOWLEDGE** - the number of specific subjects which have to be related in a classification; used by S.R.Ranganathan (ref.2).

**FILE** - 1) a collection of written or printed material arranged in some systematic order (ref.3). 2) a collection of entries on tallies; used by B.C.Vickery (ref.3).

**FIXED FIELD CODING** - the use of dedicated space in a coding field for particular classes or groups of codes. In fixed field coding a particular code, if present, is always found in the same position. Contrasted with free field coding (ref.1).

**FLAG** - any of various types of indicators used for identification, e.g. a word mark.

**FLEXIBILITY** - the quality of a classificatory notation which permits the insertion of new terms (ref.4).

**FLEXIONAL SYMBOLS** - symbols, the elements of which have different meanings in different contexts (as in the traditional decimal symbol, (ref.2)).

**FOCUS** - a class or isolate in the idea plane, a subject or an isolate in the verbal plane, and a class number or isolate number in the notational plane; used by S.R.Ranganathan.

**FRACTIONAL SCANNING** - scanning a file in a series of stages; compare binary search (ref.3).

**FRAGMENTING** - the breaking down of a document into a series of terms or descriptors.

**FREE** - in relation to coordinate indexing: alone, not bound or joined to a separate modifier. See bound.

**FREE FIELD CODING** - use of a complete coding field with entry of codes not restricted to fixed positions.

**FREE TERMLIST** - a list of terms or descriptors in which the terms or descriptors are not rigidly defined, and to which terms or descriptors can be freely added.

**FUNCTOR** - a linguistic feature denoting structure rather than lexical meaning.

## G

**GAP** - an hiatus in a collection, commonly of serials or regularly issued proceedings.

**GENERIC CODING** - encoding of descriptors such that generic relations are preserved; e.g. encoding by hierarchical class numbers or encoding with characteristics, replacing each descriptor by a compound of its characteristics (ref.3).

**GENERIC DESCRIPTOR** - a descriptor which includes each specific descriptor or term assigned to a member of a set of related subject classes. It consists of a number of coordinate terms (ref.3).

**GENERIC RELATION** - 1) relation of species and genus. 2) the relation between classes in a chain of subordinated classes, where each foregoing member includes all following members of the chain (ref.3).

**GENUS OF** - concept A is a genus of concept B if it includes the whole of the characteristics of B and some further characteristics.

**GLOSSARY** - an explanation of the meanings of terms peculiar to a subject field.

## H

**HARD COPY** - readable copy produced from a form not easily readable by human beings, e.g. printed reports, listings, documents, summaries, etc. (ref.1).

**HIERARCHIC** - arranged in serial rank rather than ordinal position.

**HIERARCHIC CLASSIFICATION** - a system of interrelated classes, arranged in a chain or lattice such that each class includes or is included in another class. The classification may correspond to an apparent natural order, or it may be arbitrary.

**HIERARCHICAL CLASS NUMBER** - a class number whose structure displays the classified hierarchy, e.g. the generically related descriptors D, F, G and H being respectively represented by 3, 31, 311, 3111, then by reaching term 311 in the file, generic relations can be followed up by searching for all marks which are included by 311 (i.e. 31 and 3) and all which include 311 (i.e. 3111) (ref.3).

**HIERARCHICAL LINKAGE** - a device for combining facilities for both generic and specific search by including both generic and specific descriptors in the file; this gives the possibility to retrieve either all documents relating to the generic descriptor and its subordinate aspects or only the documents dealing with the specific descriptor; typical of the classified catalogue (ref.3).

**HIERARCHY** - a specified rank or order of items; thus, a series of items classified by rank or order.

**HISTORICAL ORDER** - a possible order for terms in an array which form a series of coordinate classes; used by E.C.Richardson (ref.2).

**HOLLERITH** - a widely used system of encoding alphanumeric information onto cards, hence Hollerith cards is synonymous with punch cards. Such cards were first used in 1890 for the U.S. Census and were named after Herman Hollerith, their originator.

**HOMONYM** - a word identical with another in its external form, but different in origin and meaning (ref.4).

**HOSPITALITY** - in colon classification a notational quality allowing for the introduction of new classes or subdivisions.

## I

**IDENTIFICATION** - a code number or code name which uniquely identifies a record, file or other unit of information.

**IDENTIFY** - to attach a unique code or code name to a unit of information.

**IMMEDIATE ACCESS** - items or data from storage can be obtained directly without serial delay due to other units of data, and usually in a relatively short period of time.

**INCLUSION RELATIONS** - in a descriptor network the following inclusion relations can be distinguished:

- a) the sum of any two elements includes each of the elements.
- b) the product of any two elements is included by each element.
- c) if term A is generic to term B, then it includes it (ref.3).

**INCLUSIVE RELATION** - one of the ten analytical relations used in the semantic code; e.g. wing-bird. The concept wing is a component of the whole represented by the concept bird (ref.3).

**INDEX** - an ordered reference list of the contents of a file or document, together with keys or reference notations for identification or location of those contents.

**INDEXABLE ITEMS** - topics into which a document may be divided for indexing; for each topic is provided a separate index entry with a separate set of descriptors, used by F.R.Whaley (ref.3).

**INDEX CARD** - 1) usually a 5 by 3 inch card carrying the abstract, the subject analysis (subject headings, descriptors, etc.) and any other information (such as security classification) which is to be recorded for a document in a collection. 2) a card carrying an index entry.

**INDEXING** - 1) preparing an organized or systematic list which specifies, indicates or designates the information or contents of a document or group of documents. 2) assigning descriptors to a document on the basis of well-defined rules.

**INDICATIVE ABSTRACT** - a concise abstract calling attention to the fact that a certain type of information is contained in a document, in such a way that it enables the user to decide whether or not to refer to the original.

**INDIRECT CODE** - a code which uses a combination of marks on a storage medium to represent one descriptor, e.g. several holes on a punched card.

**INDIRECT HEADING** - an inverted heading so that a more significant word is brought to the front for entry (ref.5).

**INFORMATION** - knowledge concerning some particular fact, subject, or event in any communicable form; for purpose of documentation, it has three basic criteria; existence, availability and semantic content.

**INFORMATION CENTER** - synonymous with information evaluation center (ref.6).

**INFORMATION EVALUATION CENTER** - an organization primarily for judging the values, validity and completeness of the information derived from experiments, research, development, test and engineering; and for summarizing and reporting such evaluations (ref.6).

**INFORMATION HANDLING** - the storing and processing of information and its transmission from the source to the user. Information handling excludes the creation and use of information (ref.6).

**INFORMATION OFFICER** - person responsible for the collection, searching for and dissemination of specialized information.

**INFORMATION PROCESSING** - the processing of data representing information.

**INFORMATION REQUIREMENTS** - the actual or anticipated questions which may be posed to an information system.

**INFORMATION RETRIEVAL** - the recovery of data from a collection for the purpose of obtaining information. Retrieval includes all the procedures used to identify, search, find and remove specific information or data stored. It excludes both the creation and the use of the data (ref.6).

**INFORMATION RETRIEVAL SYSTEM** - a system for locating and selecting, on demand, certain documents, or other graphic records, relevant to a given information requirement from a file of such material. Examples of information retrieval systems are classification, indexing and machine searching systems (ref.1).

**INFORMATION SCIENCE** - the study of the generating, acquiring, processing, storing, retrieving, disseminating and using information; the study of the properties, structure and transmission of information; and the development of methods for the useful organization of data and dissemination of information (ref.6).

**INFORMATION SCIENTIST** - a person informed in the field of information science who is capable of observing, measuring and describing the behaviour, properties and flow of information; and who, through research, advances its understanding and use. The information scientist engages in information science *per se*; whereas an information specialist engages in information activities concerning a specialized subject (ref.6).

**INFORMATION SPECIALIST** - a person primarily engaged in the processing of data in a particular field such as human engineering, or solid-state physics. A librarian, by way of contrast, devotes his efforts to document control and reference services (ref.6).

**INFORMATIVE ABSTRACT** - an abstract summarizing all relevant arguments, data and conclusions contained in a document, in such a way that it may obviate the necessity of consulting the original. Also called digest or abridgment.

**INSTRUMENTAL RELATION** - one of the ten analytical relations used in the semantic code, e.g. harvest-plant, hardening-metal, jacketed-cover. The concept is produced by, acts on or is acted on by the descriptor (ref.3).

**INTENSION** - the complete definition of a concept by statement of its attributes.

**INTEREST PROFILE** - the subject interests of a person or an organization. Interest profiles may be used for selective dissemination of information (ref.6).

**INTERPOLATION IN ARRAY** - a device for adding new terms in an array; with a purely ordinal notation interpolation is always possible, provided no term ends with the first digit in the base used for significant symbols; with strictly hierarchical notation this is only possible if a gap has been left in the numbering (ref.2).

**INTERRELATIONAL CONCEPTS** - relations, i.e. symbols which define the connexions of a named-thing (= encoded term) with other named-things in a compound subject; such as temporal relations (e.g. simultaneous, of equal length) and relations of spatial association (e.g. nothing in common); used by D.D.Andrews and S.M.Newman (ref.2).

**INTRINSIC RELATION** - one of the ten analytical relations used in the semantic code; e.g. diamond-carbon. The concept diamond is a whole of which the concept carbon is a component (ref.3).

**INVERSION** - the rearrangement of words of a substantive heading. The alteration of a semanteme to indicate alphabetically the parent lexeme: e.g. the name dimethyl benzene may be altered to benzene, dimethyl to show the parent structure.

**INVERTED FILE** - a file in which all items or records are identified by, e.g., descriptors: behind each descriptor are all items or records identified by it.

**IRONY** - a figure of speech in which a meaning is expressed by its negation (ref.3).

ITEM - 1) a set of one or more fields containing related information.  
 2) a unit of correlated information relating to a single person or object.  
 3) the contents of a single message.  
 4) that part of a document whose identity is separately recorded in the store of an information retrieval system.

ITEM ENTRY - a method of descriptor file organization whereby the entry for an individual document comprises a subject description (a single descriptor, a set of unrelated descriptors, or a series of related descriptors), together with all relevant data for that document; used by card catalogues, edge slotted cards etc.; synonymous with document system (ref.3).

## J

JOURNAL - a periodical publication especially dealing with matters of current interest often used for official or semi-official publications of special groups or organizations (ref.8).

JUXTAPOSITION OF SYMBOLS - a method of showing relation between two headings by tying their symbols by juxtaposition or by juxtaposing each of them to a third symbol (ref.2).

## K

KAISER INDEX - a system of alphabetical indexing devised by J.Kaiser which requires the decomposition of complex words into "concrete" (substance, equipment, things, forms of energy) and "process" (static or dynamic conditions of the concrete); e.g. agriculture is indexed as land: cultivation, bibliography as book: description.

KERNEL STRUCTURES - statements resulting from the linguistic transformation of text sentences into the subject-predicate form; used by Z.S.Harris (ref.3).

KEYWORD - 1) a word extracted verbatim from a document to represent all or part of its information content. 2) grammatical element with a crucial meaning in a document. 3) the significant word in the title of a document (ref.4).

KEYWORD IN CONTEXT INDEX - a listing, usually of document titles, with the significant words arranged in alphabetic order in a column. The method of display of the printed index shows the keyword in some context (ref.1).

KINETIC RELATION - a phase relation expressing motion, e.g. A can move to, from, into, out of, through, on, off, along B, etc. (ref.2).

KWIC INDEX - see Keyword in Context Index.



## L

**LABELLED NOTATION** - a style of notation used in colon classification; each main class is labelled by a letter; each facet is first symbolized by combining the main class letter and a facet indicator; simple terms are represented by the numerals (ref.2).

**LANGUAGE** - 1) a defined set of characters which are used to form symbols, words, etc., and the rules for combining these into meaningful communication. 2) a combination of a vocabulary and rules of syntax.

**LATTICE STRUCTURE** - the algebraic structure of the information file described as a network or lattice of units of information linked to each other and to document references; used by R.A.Fairthorne (ref.2).

**LEADER** - a record which precedes a group of detail records, giving information about the group not present in the detail records.

**LETTER** - 1) any symbol of some designated list, including the space symbols. 2) one of a set of symbols combined to represent written words.

**LEVEL OF PERSONALITY** - in colon classification the subsequent sub-facets depending on a given personality; used by S.R.Ranganathan (ref.2).

**LEXEME** - a word, particle or stem which denotes the meaning.

**LEXICON** - a vocabulary, not necessarily in alphabetic order, with definitions or explanations for all terms.

**LIBRARY** - a collection of books and similar material organized and administered for reading, reference and study (ref.6).

**LIBRARY OF CONGRESS CLASSIFICATION** - the total number of classification schedules used in the various subject departments of the U.S. Library of Congress. Each schedule represents a main subject class and has been developed more or less in isolation by the corresponding department. The LC classification uses notation symbols of capital letters for the main subject classes plus integral numbers for further division, leaving gaps for future expansion (ref.5).

**LINKS** - symbols used to relate major descriptors in a document (ref.1).

**LIST PROCESSING** - a method of file organization whereby the searcher is first directed through a dictionary to the latest record associated with a term; this record also contains the chain address of the next record having the same descriptor, and so one can run through a chain or list until one reaches the oldest or last record.

**LITERARY WARRANT** - a criterion adopted in the development of a descriptor language which means that if a given subject has appeared in the literature, and if it is desired to retrieve documents specifically relevant to that subject, with minimum dilution by other documents, then it must be possible to represent the subject by the descriptors used in the system (ref.3).

**LOCATOR** - a device for determining the position of an entity in a file or document. A component in machine documentation systems, hence a locative.

**LOGIC** - the science dealing with the criteria or formal principles of reasoning and thought.

**LOGICAL OPERATIONS** - operations applicable to mental constructs and common to many fields, e.g. definition, theory, nomenclature (ref.2).

**LOGICAL ORDER** - a possible order for terms in an array which forms a series of coordinate classes; from the complex to the simplest; used by E.C.Richardson.

**LOGICAL RELATIONS** - logic difference, logic product and logic sum (ref.3).

**LOGIC DECISION** - the choice or ability to choose between alternatives. Basically this amounts to an ability to answer yes or no with respect to fundamental questions involving equality and relative magnitude.

**LOGIC DIFFERENCE** - given two classes a and b, the logic difference a-b consists of all elements belonging to class a but not to class b.

**LOGIC PRODUCT** - given two classes a and b, the logic product or intersect, ab, consists of those elements belonging both to class a and class b.

**LOGIC SUM** - given two classes a and b, the union or logic sum, a+b, consists of all elements belonging to either a or b or both.

## M

**MACHINE-SENSIBLE INFORMATION** - information in a form which can be read by a specific machine.

**MACHINE TRANSLATION** - the automatic translation from one representation to another representation. The translation may involve codes, languages or other systems of representation.

**MACRODOCUMENTS** - comprehensive or extensive documents, e.g. books, monographs, collections; used in colon classification.

**MAGNETIC STORAGE** - a storage device that utilizes the magnetic properties of materials to store data, e.g. magnetic cores, tapes and films.

**MAIN CLASSES** - the fairly homogeneous, conventional regions of knowledge, which together form the first order array of classes which are mutually exclusive and totally exhaustive of the field of knowledge; definition by S.R.Ranganathan (ref.2).

**MAIN ENTRY** - a full catalogue entry, usually by author, giving all the information necessary to complete identification of a work. In a card catalogue, this entry bears also the tracing of all the other headings under which the work in question is entered in the catalogue (ref.1).

**MANIPULABLE TEXT** - text in a form which can be manipulated by machines (ref.3).

**MANIPULATIVE INDEX** - an index in which manipulations other than turning pages, reading entries, following cross references and locating documents are necessary. Mechanized indexes using punched cards, and the various coordinate indexing systems are examples; used by C.Bernier.

**MANUAL INPUT** - the entry of data by hand into a device at the time of processing.

**MARGIN-PUNCHED CARD** - synonymous with edge-punched card.

**MARKER** - a symbol used to separate two or more independent subject descriptions assigned to the same item (ref.3).

**MASTER CARD** - a card containing fixed or indicative information for a group of cards. It is usually the first card of that group.

**MASTER FILE** - 1) a file containing relatively permanent information. 2) a main reference file of information.

**MATCHING** - the comparison of two sets of codes to ascertain their identity or difference. It is the basic operation in selecting, sorting or collating.

**MATHEMATICAL MODEL** - the general characterization of a process, object, or concept, in the terms of mathematics, which enables the relatively simple manipulation of variables to be accomplished in order to determine how the process, or concept would behave in different situations (ref.1).

**MATHEMATICAL ORDER** - a possible order for terms in an array which forms a series of coordinate classes; order by means of a notation; synonymous with Ranganathan's canonical order; used by E.C.Richardson (ref.2).

**MATRIX** - an array; items arranged in a pattern.

**MATTER** - in colon classification one of the five fundamental categories (time, space, energy, matter and personality) of which the facets encountered in the field of knowledge are manifestations; it comprises constituent materials of all kind; used by S.R.Ranganathan.

**MEANING** - the concept corresponding to a given term. In storage and retrieval meaning is the relation of formal equivalence between symbols (codes). This implies substitutability of equivalent codes (ref.4).

**MECHANIZED CLASSIFICATION** - mechanical selection of keywords from a body of text and clustering them together, on the basis of cooccurrence, into classes not unlike those appearing in a humanly constructed thesaurus (ref.3).

**MECHANIZED INDEXING** - see automatic indexing 2).

**MECHANICAL TRANSLATION** - a generic term for language translation by computer or similar equipment.

**MEET OF CLASSES** - the logic product of classes (ref.3).

**MEMORY** - synonymous with storage; memory usually refers to the human function, storage to the machine function.

**METALANGUAGE** - 1) an intrinsic language not linguistically expressed lying at the background of any actually pronounced sentence in any language. 2) a language used to talk about another language called an object language; a language  $L'$  employing expressions of a higher logical type than those of a given language  $L$ .

**METONYMY** - a figure of speech in which an attribute of a thing is used instead of the thing, e.g. crown for a king (ref.3).

**MICROCARD** - an opaque microfilming reproduction generally not readable without optical aid.

**MICRODOCUMENTS** - specific or highly specialized documents, e.g. patents, journal articles, individual chapters in books; used in colon classification.

**MICROFICHE** - a sheet of film on which is reproduced micro-reproductions of documents.

**MICROFILM** - 1) a transparent flexible material carrying microphotographs for optical, but not cinematographic, projection or viewing. 2) a microtransparency commonly in reel form as distinguished from a microfiche which is in sheet form.

**MICROFILM READER** - a projection device for showing a readable image of a microtransparency, usually with a self-contained screen. Comparable devices are microcard reader and microfiche reader.

**MICROFORM** - a miniature replica of data, e.g. microfiche, microfilm, aperture card, etc. (ref.6).

**MICRORECORD** - a copy reproduced in a form generally not readable without optical aid.

**MINICARD** - microimage card developed by Eastman Kodak by using photographic techniques for both image and coded index data.

**MISSES** - relevant documents not retrieved in a search.

**MNEMONIC** - pertaining to the assisting, or intending to assist, human memory; thus a mnemonic term, usually an abbreviation that is easy to remember.

**MODULANTS** - a category indicating the relation of a descriptor to a root-word; e.g. with the root-word *enpack*, *process*, *apparatus*, *condition* are modulants of the descriptors *enpackage*, *enpackager*, *enpackaged*; used by D.D.Andrews and S.M.Newman (ref.2).

**MULTI-ASPECT** - pertaining to searches or systems which permit more than one aspect, or facet, of information to be used in combination one with the other to effect identifying and selecting operations.

**MULTILEVEL ACCESS** - a form of access pertaining to files in which entries or blocks of entries are arranged in a definite order of subject symbols; the symbols can order the entries systematically in the same way as the notation of a classified card catalogue or as in alphabetical indexing (ref.2).

**MULTILEVEL SCANNING** - scanning of tallies in a series of stages, as a classified catalogue is searched (ref.3).

**MULTIPLE ACCESS** - simultaneous search of storage by two or more independent searchers or search devices. A library card catalogue has multiple access because it can be searched by more than one person at a time (ref.1).

**MULTIPLE ASPECT INDEXING** - see coordinate indexing.

**MULTIPLE ENTRY** - pertaining to item entry systems; to file as many tallies for an item as there are terms assigned to it. If an entry has been assigned terms *ABDG* it is filed under *ABDG*, *BDGA*, *DGAB* and *GABD* respectively (ref.3).

**MULTIPLE LOCATION** - the occurrence of a given term in more than one context in a classification (ref.2).

## N

**NATURAL LANGUAGE** - a language whose rules reflect and describe current usage rather than prescribed usage.

**NEED TO KNOW** - a basic principle of security to confine access to classified information to those whose duties make such access essential. No person is entitled to have access solely by virtue of rank or appointment.

**NEGATIVE RELATION** - one of the ten analytical relations used in the semantic code, e.g. dark-light. The concept dark represents something which is absent in the concept light (ref.3).

**NOISE** - items selected in a search which do not contain the information desired or items delivered by a search through accidental code combinations (ref.1).

**NOISE FACTOR** - see efficiency factors.

**NON-CONVENTIONAL INFORMATION RETRIEVAL SYSTEM** - an information retrieval system in which a plurality of terms is assigned to documents, the system being designed to facilitate retrieval of information by determining the set of documents represented by the logical intersection of two or more terms.

**NON-LOCAL ENTRY** - in an item entry system, an entry having generic relations indicated by cross-reference and interlocking of descriptors indicated by interfixes, so that the individual terms do not have to follow each other in any definite sequence on the tally or be in any fixed field; used by C.N. Mowers (ref.3).

**NORMAL FILE** - a file in which each item pertains to one document, and identifies all descriptions disclosed in that document.

**NOTATION** - 1) a representational system which utilizes characters and symbols in positional relationships to express information. 2) an arbitrary set of symbols used to indicate the contents or location of a document (ref.1). 3) an annotation.

**NOTCHED CARDS** - cards having holes prepunched in a number of positions along the margin and which are coded by converting these holes into notches, each notch position or a combination of notch positions corresponding to the verbal headings assigned to the document referenced on the face of the card (ref.2).

**NOUN COMBINATION** - see noun order (ref.2).

**NOUN ORDER** - the order of nouns in a compound heading, established according to one of several rules, e.g. concrete-process (Kassir), by using operators (Farradane) or by using facet citation chains such as thing-part-constituent-property-measure.

## O

**OBJECTIVE CLASSIFICATION** - a classification of the sciences according to the attributes of the material entities studied (ref.2).

**OCTAVE** - a zone or region of an array marked off from others (ref.7).

**OCTAVE DEVICE** - in colon classification the use of the digit 9 as an "empty" digit or octavizing digit in order to accommodate an unlimited number of terms in an array (ref.2).

**OCTAVE NOTATION** - a device used by Ranganathan where 9 ceases to represent a number but rather indicates a change of cycle or shows coordination between numbers. Thus the number system is 1, 2, 3, 4, 5, 6, 7, 8, 91, 92, 93, ..... 991, 992, .....

**OMISSION FACTOR** - see efficiency factors.

**OPEN ENDED** - being possessed of the quality by which the addition of new terms, subject headings, or classification does not disturb the pre-existing system.

**OPERATIONS RESEARCH** - the use of analytic methods adopted from mathematics for solving operational problems. The objective is to provide management with a more logical basis for making sound predictions and decisions.

**OPTICAL CHARACTER RECOGNITION** - a technique for machine recognition of characters by their images.

**ORDER IN ARRAY** - the ranking of classes in array according to a number of postulated principles; e.g. Richardson's logical-, geometrical, chronological-, genetic-, historical-, evolutionary-, dynamic-, alphabetical-, and mathematical orders or Ranganathan's order of decreasing extension, order of increasing concreteness, evolutionary-, chronological-, geographical-, and canonical orders (ref.2).

**ORDER OF A CLASS** - the number of successive characteristics needed to derive a specific isolate or class from its primordial universe; used by S.R.Ranganathan.

**ORTHOGRAPHIC CODING** - 1) a device for increasing the efficiency of single-field superimposed coding systems through a statistical analysis of the spelling of the descriptive headings used. 2) a superimposed coding system using pairs of letters in a single field; used by P.T.Gilbert Jr.

## P

**PAMPHLET** - a short work commonly bound as a single band or fascicle, and published as a separate issue. Unlike a reprint or separate, a pamphlet is not a part of a larger work.

**PATIENT** - a category connected with the interaction of two entities; one of the reactants, e.g. when we say "light acts on a dye to make it fade", light is called the agent and dye the patient (ref.2).

**PATTERN RECOGNITION** - the identification of shapes, forms or configurations by automatic means.

**PEEK-A-BOO CARDS** - cards which are punched in dedicated spaces for the accession numbers of documents, judged to be related in an important fashion to the concept for which the card is established. In the search process, cards, representing the aspects of information believed to be relevant, are superimposed. The holes which coincide (through which light passes) serve to locate the numbers of documents which relate to all predetermined aspects of interest (ref.1). Synonymous with visual punched cards and coincident hole cards.

**PEEK-A-BOO SYSTEM** - a coordinate term inverted file system in which the storage medium is a set of cards, one for each term, on which the identities of the documents or items to which terms are assigned are directly coded by perforations, each possible position for a perforation or a card representing a document or item; corresponding positions on all cards represent the same document or item, the operation of intersection being performed by superimposing the associated cards and examining optically for coincidence of perforations.

**PEEPHOLE CARD** - a card of the peek-a-boo variety (ref.2).

**PERIODICAL** - a continuing publication, usually with a distinctive title, and appearing in successive issues at stated regular intervals (ref.6).

**PERMUTATION** - any of the total number of changes in position or form that are possible in a group.

**PERMUTATION INDEXING** - an indexing technique using significant words derived from a document as index terms and displaying each of these, usually by machine methods, in a printed alphabetical list (permutation index) together with adequate bibliographical information on that document.

**PERMUTED TITLE INDEXING** - a permutation indexing technique using significant words derived from the title of a document as index terms and displaying each of these, usually by machine methods, in a printed alphabetical list (permuted title index) together with adequate bibliographical information on that document.

**PERSONALITY** - in colon classification one of the five fundamental categories (time, space, energy, matter and personality) of which the facets encountered in the field of knowledge are manifestations; it includes numbers, equations, chemical substances, art styles, literary products, etc.; used by S.R.Ranganathan (ref.2).

**PERTINENCE** - a state or quality implying an immediate and direct bearing on the matter in question (ref.1); see also: relevance.

**PERTINENCY FACTOR** - see efficiency factors.

**PHASE** - an aspect when brought into relation with other aspects.

**PHASE RELATIONS** - in colon classification common relations which can occur between two terms in the same category, or between two categories in the same field, or between one field and another. Ranganathan suggests five phase relations, viz. biasing, tool, aspect, comparison, influencing (ref.2).

**PHONEME** - a primitive unit of auditory speech in a given language.

**PHRASE** - a unit consisting of certain specified closely related terms; definition by J.Melton (ref.3).

**POLYDECIMAL** - a classification system developed by L.Melot, using both letters and numbers.

**POLYHIERARCHIC** - pertaining to an organizational pattern involving a multiplicity of facets or aspects.

**POLYVALENCE** - the property of being interrelated in several ways.

**POLYVALENT NOTATION** - a system of notation wherein each digit represents one of the characteristics of division. Semaphore indexing is a polyvalent notation.

**POST** - 1) to enter a unit of information on a record. 2) to put the accession number of a document under each entry representing a coordination term. 3) to transfer an indicial notation from a parent or main entry to individual analytic entries, e.g., to type the proper catalogue entry and number at the top of a group of catalogue cards.

**PRACTILE** - the percentage of useful documents retrieved per search.

**PREPRINT** - a copy of a paper to be presented at a meeting, and which is issued prior to the meeting; as opposed to a reprint which is issued after the paper has appeared in a journal or other publication (ref.6).

**PREPUBLICATION** - the practice of disseminating small editions, prepared by gelatine or similar duplication procedures, of scientific or technical documents, papers, etc. prior to publication in regularly issued serials.

**PRIMARY ACCESS** - access to a particular entry or block of entries in a file (ref.3).

**PRIMARY DISTRIBUTION** - the initial sending of a document from its originator or publisher to more than one destination, e.g. issuing a technical report in accordance with a distribution list (ref.6).

**PRIMARY PUBLICATION** - a publication that is devoted primarily to original papers. A primary publication is to be distinguished from a secondary publication (ref.6).

**PROCESS** - to subject to rapid examination and handling for recording preliminary data of documents etc. (ref.8).

**PRODUCT OF CLASSES** - see logic product (ref.3).

**PRODUCTIVE RELATION** - one of the ten analytical relations used in the semantic code; e.g. gelation-colloid, club-beat; the concept (gelation, club) produces, or is used for or to, the concept (colloid, beat) (ref.3).

**PROFILE** - see interest profile (ref.6).

**PRONOUNCEABLE NOTATION** - a notation which is designed to produce symbols whose pronunciation is internationally recognized; designed by E. de Grolier who uses only the letters A, E, I, K, L, M, N, O, P, S, T and U (ref.2).

**PROPRIETARY INFORMATION** - information owned by virtue of discovery or purchase (ref.6).

**PUBLICATION** - a form of document for the dissemination of information; sometimes the term is reserved for a document which is on sale. see also: primary publication, secondary publication.

## R

**RANDOM ACCESS** - pertaining to the process of obtaining data from, or placing data into, storage when there is no sequential relation governing the access time to successive storage locations.

**RANDOM ACCESS STORAGE** - a storage technique in which the time required to obtain information is independent of the location of the information - that is, items do not have to be processed in sequence (ref.1).

**RANDOM CODING** - the selection of a set of code elements to represent a character in such manner that the probability of choice of any one set of code elements is equal to the probability of any other set (ref.1).

**RANK** - 1) a measure of the relative position in a series, group, classification, or array. 2) to arrange in an ascending or descending series according to importance.



**RAPID SELECTOR** - a machine for document storage and retrieval. Documents are photographed on to 35 mm microfilm and alongside are placed digital dot codes indexing each frame. In searching, a reel of film is run past an optical scanner which reads the optical dot pattern. Documents selected are copied automatically from the reel of film (ref.1).

**RAW DATA** - data which has not been processed. Such data may or may not be in machine-sensible form.

**REACTION** - 1) a category connected with the interaction of two entities, whereby the entities lose their identity (ref.2). 2) one of Farradane's operators used to control noun order; agent precedes object of action, action precedes object of action, process precedes product (ref.2).

**REAL TIME** - 1) pertaining to the actual time during which a physical process transpires. 2) pertaining to the performance of a computation during a related physical process to obtain results needed to guide that process.

**RECALL FACTOR** - see efficiency factors.

**RECALL RATIO** - the recall factor represented as a percentage (ref.3).

**RECORD GAP** - a gap used to indicate the end of a record.

**RECORD TRAILER** - a record which follows a group of records and contains pertinent data related to the group of records.

**REDUNDANCY** - use of more words or symbols than needed to convey the thought or word. In documentation redundancy may be planned repetition in order to overcome noise in the system (ref.1).

**REDUNDANT INDEXING** - the use of two or more terms, the meaning and scope of which is not clearly distinguishable for indexing the same information in a document.

**REFERENCE** - an indication of where to find specific information, e.g. a document, author, instruction, etc.

**REFERRAL CENTER** - an organization for directing searchers for information and data to suitable sources such as libraries, information evaluation centers, documents or documentation centers and individuals. A referral center does not supply data or documents (ref.6).

**RELATIVE INDEX** - an index to a classified system in which all relationships and aspects of the subjects are brought together under each index entry.

**RELEVANCE** - the state or quality implying close logical relationship with, and importance to, the matter under consideration. See also pertinence (ref.1).

**RELEVANCE RATIO** - the pertinency factor represented as a percentage (ref.3).

**REMOTE CONTROL EQUIPMENT** - the formulating and reformulating apparatus used for performing a prescribed function or functions at a distance by electrical means.

**REPORT GENERATION** - a technique for producing complete machine reports from information which describes the input file and the format and content of the output report.

**REPRINT** - a duplicate of a paper as published in a journal. Reprints are imprinted from the same type or plates, and usually are supplied to the author at the time of publication. Reprints may not be available afterwards (ref.6).

**RESEARCH LIBRARY** - a library that provides reference and referral service in support of studies in subject fields related to research, development, test, engineering and evaluation (ref.6).

**RESOLUTION FACTOR** - see efficiency factors (ref.3).

**RETRIEVAL EFFICIENCY** - see efficiency factors.

**RETROACTIVE NOTATION** - a notation used for inserting compound terms at preferred positions in a catalogue by leaving a certain block of the lower-valued digits in the base free for the formation of compound terms (ref.2).

**REVERSE CODE DICTIONARY** - an alphabetic or numeric alphabetic arrangement of codes, associated with their corresponding English words or terms.

**REVIEW** - a critical appreciation of a book or article of recent publication. see also: literature search, state of the art review.

**ROLE INDICATOR** - a code assigned to a keyword to indicate the role of that keyword, e.g. a keyword is coded as a noun, verb, adjective, etc.

**ROTATED ENTRY** - a method of cross reference introduced by C.L. Bernier, e.g. main entry: spectra - atoms - helium - fine structure; added entries: atoms - helium - fine structure - spectra, helium - fine structure - spectra - atoms, etc.

**ROTATIONAL INDEXING** - a method of indexing similar to correlative indexing.

**RULY ENGLISH** - an english in which every word has one and only one conceptual meaning and each concept has only a single word to describe it. Used by the U.S. Patent Office to develop their index codes.

## S

**SCALAR SERIES** - a chain of classes, used by H.E. Bliss.

**SCHEDULE** - 1) a series of coordinate classes arranged in order with subclasses intercalated. 2) a formal list, catalogue, or inventory of subject headings, classes, calendars or orders of documents. 3) a list of terms indicative or definitive of the divisions of a conventional classification system, usually showing the hierarchical relationships between classes.

**SCOPE NOTE** - a description giving the range or meaning and limits of a subject heading or descriptor (ref.1).

**SCREEN** - to make a preliminary selection of information or documents in order to reduce the number examined at a later time.

**SEARCH STRATEGY** - an analysis and formulation of the optimum methods by which a specified requirement for information may be answered in a documentation system.

**SECONDARY ACCESS** - access from one entry to related entries in a file (ref.3).

**SECONDARY DISTRIBUTION** - the distribution of documents in response to requests received after primary distribution has been completed (ref.6).

**SECONDARY PUBLICATION** - a publication that informs only of data in primary publications, e.g. Chemical Abstracts, Mathematical Reviews (ref.6).

**SELECTIVE ABSTRACT SERVICE** - an abstracting service which selects for abstracting only those publications and articles which it considers are likely to be of use to a specific class of readers.

**SELECTIVE DISSEMINATION OF INFORMATION** - the dissemination of data or documents according to an interest profile (ref.6).

**SELECTOR CODE** - in combination coding, a combination such that the number of selection operations needed to isolate a subject is minimized (ref.3).

**SELF-ADAPTING** - pertaining to the ability of a system to change its performance characteristics in response to its environment.

**SELF-DEMARCATING CODE** - a systematic method of abbreviating words (ref.3).

**SELF-ORGANIZING** - 1) pertaining to the ability of a system to arrange its internal structure. 2) capable of spontaneous classification.

**SEMANTEME** - a grammatical particle representing a single idea, notion or image. A conceptual element of language.

**SEMANTIC CODE** - a linguistic system developed for use on machines, designed to detect logically defined combinations. Used particularly by the Center for Documentation and Communication Research, Western Reserve University.

**SEMANTIC FACTORS** - generic concepts used to indicate important aspects of meaning of terms of more specific nature. For instance, the specific term "thermometer" might be related to three semantic factors "temperature", "measure" and "device" (ref.1).

**SEMANTIC MATRIX** - a graphical device for plotting in a standard conventional form whatever precise elements of meaning have been ascertained from the semantic analysis of a concept.

**SEMANTICS** - 1) the study of the relations between linguistic symbols (words, expressions, phrases) and the objects or concepts to which they refer. 2) the science of meaning.

**SEMAPHORE INDEXING** - a system of indexing with punched cards, each punch being shaped so as to indicate morphological changes in the subject.

**SEPARABLE** - 1) the condition of a word in which the word retains its unique decipherability no matter how it may be separated. 2) the condition of a message in which the message retains its unique decipherability no matter how it may be separated.

**SEPARATE** - a reprint or special copy of an article, chapter or other part of a larger publication. Distinguished from a pamphlet in having been issued originally in a larger publication.

**SEQUENCE** - 1) to put a set of symbols into an arbitrarily defined order. 2) an arbitrarily defined order of a set of symbols; i.e. an orderly progression of items of information or of operations in accordance with some rule.

**SEQUENTIAL** - 1) pertaining to an ordinal array. 2) pertaining to a hierarchical system.

**SERIAL** - 1) pertaining to the time-sequencing of two or more processes. 2) pertaining to the time-sequencing of two or more similar or identical processes, using the same facilities for the successive process. 3) pertaining to the time-sequential processing of the individual parts of a whole, such as the bits of a character, the characters of a word, etc., using the same facilities for successive parts. 4) a publication issued in successive parts bearing numerical or chronological designations and intended to be continued indefinitely (American Library Association. Anglo-American Cataloguing Rules 1967).

**SERIAL ACCESS** - pertaining to the process of obtaining data from, or placing data into, storage when there is a sequential relation governing the access time to successive storage locations.

**SET** - a collection.

**SHEAF CATALOGUE** - a catalogue having the entries on slips of paper, which are arranged systematically and inserted in some binder; see also catalogue 2).

**SHELF LIST** - a record of the books in the library arranged in the order in which they stand on the shelf, that is, in the order of their class and book numbers; used by the Library of Congress.

**SIGIL** - a coded bibliographical reference consisting typically of letters and numerals representing respectively date, name of publication, volume, page and article (ref.8).

**SIGNIFICANT LETTER CODE** - a systematic method of abbreviating words (ref.3).

**SIMULATIVE RELATION** - one of the ten analytical relations used in the semantic code; e.g. whale-fish. The concept whale resembles but is not the concept fish.

**SIMULTANEOUS SCANNING** - a way of file scanning, as a pack of notched cards is "needled".

**SKELETON ABSTRACT** - brief or telegraphic style abstract. Synonymous with telegraphic abstract.

**SLANT** - to give a bias, e.g. to abstract a document using only those parts favorable to the abstractor's preconceptions or interests.

**SLOTTED CARDS** - cards having holes prepunched in a number of positions in the center and which are coded by converting these holes into slots, each slot position or a combination of slot positions corresponding to the verbal headings assigned to the document referenced on the face of the card.

**SORTING** - the arranging of related documents, either alphabetically, numerically, or by class, done either manually or by machine.

**SORT OF SYMBOL** - one of a set of letters, numerals or other symbols; in the symbol ABA 553 there are four sorts of symbol A, B, 3 and 5 (ref.3).

**SOURCE DOCUMENT** - a document from which data is extracted.

**SPACE** - 1) a place intended for the storage of data, e.g. a place on a printed page or a location in a storage medium. 2) a basic unit of area on a record, i.e. an area that may contain no more than one printed character. 3) to move from one place to another according to a prescribed format, e.g. to move horizontally to the right on a printed page or vertically down a page.

**SPATIAL RELATION** - a phase relation expressing position, e.g. A can be beside, near, over, against, apart from, outside, inside to B, and so on (ref.2).

**SPECIAL LIBRARIAN** - the librarian of a special library, which may be special in subject, in the form of material collected and/or in its circle of readers.

**SPECIES OF** - concept B is a species of A, if A is a genus of B.

**SPECIFIC** - pertaining exclusively to a given field.

**SPECIFIC REFERENCE** - some specific piece of information (ref.3).

**SPECIFICATION** - definition by specific differences in character.

**SPECIFICITY** - the degree of generic character of a descriptor language (ref.3).

**SPLIT CATALOGUE** - a library catalogue in which the different varieties of entry, e.g. subject, author, title, are filed in separate alphabets.

**STATE-OF-THE-ART REVIEW** - a systematic, exhaustive, and critical review of published and unpublished material on a specific problem or subject.

**STORAGE** - 1) pertaining to a device into which data can be entered and from which it can be retrieved at a later time. 2) loosely, any device that can store data. 3) a source from which documents or information of specified descriptions may be supplied. A receptacle for information.

**STORE** - 1) to enter data into a storage device. 2) to retain data in a storage device. 3) a storage device. 4) the set of all codes which have been physically recorded in some medium, used by M.Taube (ref.3).

**SUBJECT CATALOGUING** - a form of library cataloguing that includes classification and the assignment of subject headings.

**SUBJECT DEVICE** - expansion of an array by the addition of terms which already appear in other schedules of the classification, the terms being added in the order in which they appear in the other schedule; used by S.R.Ranganathan (ref.2).

**SUBJECT HEADING** - a word or group of words indicating a subject under which all material dealing with the same theme is entered in an index, catalogue, or bibliography, or arranged in a file. See also descriptor (ref.1).

**SUBORDINATE RELATION** - the relation of a class to the one immediately above it; see also tree of knowledge.

**SUBSCRIPT** - 1) a letter or symbol in typography written below a set name to identify a particular element or elements of that set. 2) an indexing notation.

**SUBSET** - 1) a set contained within a set.

**SUGGESTIBILITY** - the ability of an index to suggest promising subject headings other than those which have been thought of before entering the index; used by M.Taube.

**SUPERIMPOSED CODING** - 1) indirect coding in which the same area of a storage medium is used to record more than one term, document, etc. so that, for example, it is not possible to determine which of the various combinations of marks represent terms by which a document has been indexed and which represent false information. 2) the use of code elements in more than one code character or code word; makes possible the entry of more characters, or words, than there are elements in any given coding field (ref.1).

**SUPERSCRIPT** - a letter or symbol in typography written above a set name to denote a power or a derivation, or to identify a particular element of that set.

**SUPPLIED TITLE** - the title composed by the cataloguer to indicate the nature and scope of the monographic work under study.

**SYLLABUS** - a brief statement of the findings in a document, commonly a foreword in legal decisions furnishing the essential elements of the judicial authority's findings.

**SYMBOL** - a representation of something by reason of relationship, association, or convention.

**SYNDETTIC** - 1) having connections or interconnections. 2) pertaining to a document or catalogue with cross references.

**SYNDETTIC INDEX** - an index which displays relationships between its headings, not only by indexing sequence, but also by auxiliary devices such as cross reference (ref.4).

**SYNECHDOCHE** - 1) the figure of speech in which a species is used for the whole genus, e.g. bread for food, or the genus for a species (ref.3). 2) the use of a generic descriptor to represent a set of included words; used by C.L.Bernier (ref.3).

**SYNONYM** - word having the same meaning as another but different external form.

**SYNOPTIC TABLE** - a classificatory map displaying the interconnections between terms; used by C.A.Cutter (ref.2).

**SYNTACTICS** - a theory that deals with the formal relations between signs or expressions and the formal properties of language, separate from their meaning or interpreters (ref.1).

**SYNTAX** - the rules governing the structure of a language.

**SYNTHETIC RELATIONSHIP** - 1) a relation existing between concepts which pertain to empirical observation. Such relationships are involved, not in defining concepts or terms but in reporting the results of observations and experiments. 2) the assembly of a set of semantemes to represent their common character.

**SYSTEMS ANALYSIS** - the examination of an activity, procedure, method, technique or a business to determine what must be accomplished and how the necessary operations may best be accomplished.

## T

**TALLY** - the actual physical unit which carries the entry, e.g. in a term entry system the list of items to which a single descriptor has been assigned; used by C.N.Moore (ref.3).

**TAPE** - strip of material, which may be punched, coated, or impregnated with magnetic or optically sensitive substances, and used for data input, storage or output. The data are stored serially in several channels across the tape transversely to the reading or writing motion.

**TAPE READER** - a device that senses information on paper or magnetic tape.

**TARGET LANGUAGE** - a language that is an output from a given translation process.

**TAXONOMY** - the science of classification. Also, the study of the name and naming of items in generic assemblies.

**TECHNICAL ABSTRACT BULLETIN** - a periodical announcement bulletin of newly published or released technical literature, containing indicative and/or informative abstracts usually grouped according to subject categories. It may contain a subject index such as a listing of subject headings in alphabetical order accompanied by the title or notation of content of the relevant document together with its accession number and its location in the bulletin, a personal author index, a corporate source index and other cross references (ref.6).

**TECHNICAL INFORMATION** - information related to the study, practices, methodology, or procedures involved in any art, science, trade or profession. Technical information includes both scientific and engineering information (ref.6).

**TECHNICAL INFORMATION CENTER** - an organization for acquiring, processing and disseminating technical information. A technical information center may include a library; a staff of scientists and engineers for extracting, indexing and evaluating technical literature; a roster of consultants on call; and capabilities for writing reports, handbooks and reviews, including the application of the graphic arts to their production (ref.6).

**TECHNICAL INFORMATION SYSTEM** - a network of information services providing facilities by which information and data are processed and transmitted from originator to user. It is by means of the technical information system that the coupling of basic research to engineering development is achieved (ref.6).

**TECHNICAL INTELLIGENCE** - information, both foreign and domestic, about industrial, military, and other technical developments evaluated in the light of a specific purpose or project (ref.6).

**TECHNICAL LIBRARY** - a library predominantly devoted to science and engineering in more than one discipline or specialty (ref.6).

**TECHNICAL REPORT** - a report concerning the results of a scientific investigation or a technical development, test, or evaluation, presented in a form suitable for dissemination to the technological community. The technical report is usually more detailed than an article or paper appearing in a journal or presented at a meeting. It will normally contain sufficient data to enable the qualified reader to evaluate the investigative process of the original research or development (ref.6).

**TECHNICAL REPORTS ANALYST** - a literature analyst who specializes in analyzing technical reports (ref.4).

**TELEGRAPHIC ABSTRACT** - an abbreviated stylized abstract commonly considered suitable for machine input and manipulation.

**TELEREFERENCE** - a reference for consulting catalogues from a remote location consisting of a closed-circuit television system for viewing the catalogue, a relay for finding the part of a catalogue to be examined and mechanical equipment for moving the catalogue cards or pages.

**TEMPORAL RELATIONS** - see interrelational concepts (ref.2).

**TERM** - a word, phrase or symbol descriptive of the subject matter content or part of the subject matter content of a document, and used as an indexing unit or for identifying a division of a conventional classification system.

**TERM ENTRY** - a method of descriptor file organization whereby the entry comprises a single descriptor and a list of numbers representing documents to which that descriptor is applicable (ref.3).

**TERMINOLOGY** - 1) the aggregate of terms representing a system of concepts particularly in a special field (ref.4). 2) the field of knowledge treating of the formation and naming of concepts, either in respect of a special subject or of the aggregate of all subject fields (ref.4).

**TEST QUESTION** - a "manufactured" question, based on an individual document known to be in the collection, for testing the retrieval efficiency of a system (ref.3).

**THESAURUS** - 1) a collection of words usually arranged by concept rather than in alphabetical order. 2) a selection of quotations, or other literary forms, chosen because of their unique merit.

**TIME** - in colon classification one of the five fundamental categories (time, space, energy, matter and personality) of which the facets encountered in the field of knowledge are manifestations; used by S.R. Ranganathan (ref.2).

**TIME SHARE** - to interleave the use of a device for two or more purposes.

**TITLE LIST** - a periodical publication in which important and relevant articles from selections of periodicals are listed by title and arranged in groups according to subject (ref.5).

**TRAILER CARD** - a card (microfiche) that follows another card (microfiche) and is provided to accommodate additional data or information or pages of a document (ref.8).

**TRAILER RECORD** - a record which follows a group of records and contains pertinent data related to the group of records.

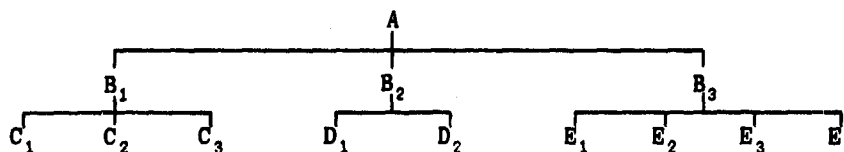
**TRAIN OF CHARACTERISTICS** - a succession of characteristics by which the universe is divided; each characteristic giving rise to an array of classes (ref.3).

**TRANSCRIBE** - to copy from one external storage medium to another.

**TRANSLITERATE** - to convert the characters of one alphabet to the corresponding characters of another.



**TREE OF KNOWLEDGE** - the traditional enumerative classification represented in model form as an inverted tree. The universe A is divided by a characteristic b to form the array of classes B<sub>1</sub>, B<sub>2</sub> and B<sub>3</sub>; division of B<sub>1</sub> (resp. B<sub>2</sub> and B<sub>3</sub>) by a characteristic c (resp. d and e) gives rise to the array C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub> (resp. D<sub>1</sub>, D<sub>2</sub> and E<sub>1</sub>, E<sub>2</sub>, E<sub>3</sub>) etc. This model expresses two types of logical relation, viz. the generic relation of each lower element (class) to the classes above it (e.g. B<sub>1</sub> to A, C<sub>1</sub> to B<sub>1</sub>) and the coordinate relation between subordinated classes (e.g. E<sub>1</sub>, E<sub>2</sub>, E<sub>3</sub>, E<sub>4</sub>).



### U

**UNION CATALOGUE** - an orderly compilation of the holdings of two or more libraries, presumptive of cooperation between the libraries.

**UNIT CARD** - a basic catalogue card, in the form of a main entry, which, when duplicated, may be used as a unit for all other entries for that work in the catalogue by the addition of appropriate headings.

**UNIT CARD SYSTEM** - a term entry using machine sorted punched cards, each card bearing a single term and a single document number; developed by G.L. Peakes (ref.2).

**UNIT CONCEPT COORDINATE INDEXING** - a system based on a combination of the colon classification structure with the techniques of the uniterm system devised by J. Waddington.

**UNIT PROCESS** - a single activity in the total field of documentation which is usually repetitive in character and which is involved in the storage, reproduction, dissemination, etc. of information. Examples are indexing, abstracting, bibliography preparation, etc.

**UNIT RECORD** - historically, a card containing one complete record. Currently, the punched card.

**UNITERM** - 1) a standardized and approved keyword. 2) a word, symbol, or number used as a descriptor for retrieval of information from a collection; especially, such a descriptor used in a coordinate indexing system.

**UNITERM INDEXING** - 1) a system of coordinate indexing which utilizes single terms, called uniterms, to define a document uniquely. 2) analysis of documents in terms of keywords representing the contents of the record that is being indexed.

**UNITERM SYSTEM** - an information retrieval system which uses uniterm cards. Cards representing words of interest in a search are selected and compared visually. If identical numbers are found to appear on the uniterm card undergoing comparison these numbers represent documents to be examined in connection with the search.

**UNIVERSE** - the field of knowledge which is to be classified (ref.4).

**UNIVERSAL DECIMAL CLASSIFICATION** - an international classification system started by P.Otlet, to be considered as an expansion of Dewey's Decimal Classification. The field of knowledge is divided into 10 main divisions or classes numbered 0 to 9. Each class is further subdivided decimally on the principle of proceeding from the general to the more specific. As a visual aid to break up long numbers a dot or "point" is inserted usually after every third figure. A list of auxiliary tables provides the symbols and/or numbers to be used to indicate connection, relation, language, form, place, race and nationality, time, individual subdivision, point of view. So called Special Analytical Numbers are available to be used for ideas that recur within special fields.

**UPDATE** - to modify a master file with current information according to a specified procedure.

## V

**VENN DIAGRAM** - a diagram in which sets are represented by closed regions.

**VERBAL INDEXING** - indexing by the use of words. A system of indexing with single substantives as subject headings.

**VOCABULARY** - 1) the stock of words used in a particular field. 2) a differentiated assembly of lexemes. 3) the set of all words used in a language.

## W

**WEED** - to discard currently undesirable or needless materials in a file.

**WEIGHTING DESCRIPTORS** - giving a measure of relevance to the descriptors assigned to a document according to a scale of weights; used by M.E.Marow (ref.3).

**WORD** - a set of characters which have one addressable location and are treated as one unit.

**WORD INDEX** - an index based on the selection of words as used in a document, without giving thought to synonyms and more generic concepts related to the term selected.

## Z

**ZATOCODING SYSTEM** - a system of coordinate indexing developed by C.N.Mooers.

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